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# MEAN WELL

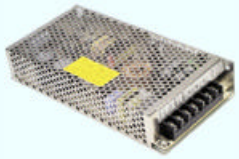
## SWITCHING POWER SUPPLY

**ISO-9001 CERTIFIED MANUFACTURER**

# S-100F SERIES

Jameco Part Number
201970 (S-100F-24)

.LOW COST, HIGH RELIABILITY .COMPACT SIZE, LIGHT WEIGHT
.105°C OUTPUT CAPACITOR .100% FULL LOAD BURN-IN TEST
.INTERNATIONAL AC INPUT RANGE .BUILT IN EMI FILTER, LOW RIPPLE NOISE
.HIGH EFFICIENCY, LOW WORKING TEMPERATURE
.SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
.SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED



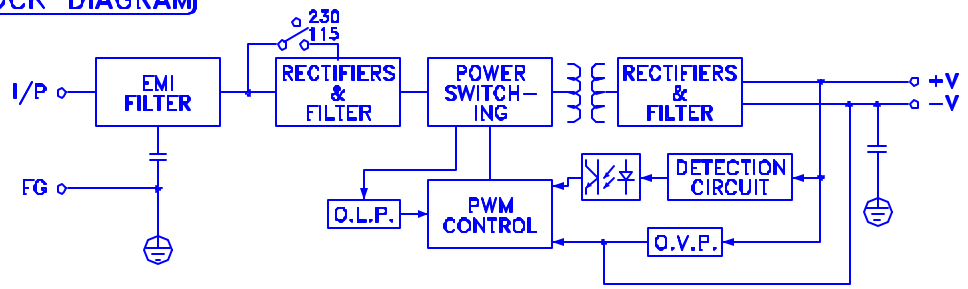
| MODEL / SPECIFICATION | S-100F-5 | S-100F-7.5 | S-100F-12 | S-100F-15 | S-100F-24 | S-100F-48 |
|---|---|---|---|---|---|---|
| DC OUTPUT VOLTAGE | 5V | 7.5V | 12V | 15V | 24V | 48V |
| OUTPUT V. TOLERANCE | ±2% | ±1% | ±1% | ±1% | ±1% | ±1% |
| OUTPUT RATED CURRENT | 20A | 13.5A | 8.5A | 6.7A | 4.5A | 2.2A |
| OUTPUT CURRENT RANGE | 0-20A | 0-13.5A | 0-8.5A | 0-6.7A | 0-4.5A | 0-2.2A |
| RIPPLE & NOISE | 100mVp-p | 125mVp-p | 125mVp-p | 125mVp-p | 150mVp-p | 150mVp-p |
| LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| LOAD REGULATION | ±1% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| DC OUTPUT POWER | 100W | 101W | 102W | 100.5W | 108W | 105.6W |
| EFFICIENCY | 76% | 78% | 80% | 81% | 83% | 84% |
| DC VOLTAGE ADJ. | ±10% | ±10% | ±10% | ±10% | ±10% | ±10% |
| INPUT VOLTAGE RANGE | 88~132VAC / 176~264VAC SELECTED BY JUMPER OR SWITCH 47~63Hz; 248~370VDC | | | | | |
| AC CURRENT | 2.4A/115V 1.2A/230V | | | | | |
| INRUSH CURRENT | COLD START 30A/115V 60A/230V | | | | | |
| LEAKAGE CURRENT | <1mA/240VAC | | | | | |
| OVERLOAD PROTECTION | 105%~150% TYPE:PULSING HICCUP SHUTDOWN RESET:AUTO RECOVERY | | | | | |
| OVER VOLTAGE PROTECTION | 115%~135% | | | | | |
| OVER TEMP. PROTECTION | ---------- | | | | | |
| TEMP. COEFFICIENT | ±0.03% / °C (0~50°C) | | | | | |
| SETUP, RISE, HOLD UP TIME | 1s, 30ms, 15ms | | | | | |
| VIBRATION | 10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES | | | | | |
| WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | | |
| ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms | | | | | |
| WORKING TEMP., HUMIDITY | -10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH | | | | | |
| STORAGE TEMP., HUMIDITY | -20°C~+85°C, 10%~95% RH | | | | | |
| DIMENSION | 199*98*38mm CASE:902 | | | | | |
| WEIGHT | 0.65Kgs | | | | | |
| SAFETY STANDARDS | UL1012, TUV EN60950 (IEC950, UL1950) APPROVED | | | | | |
| EMC STANDARDS | CISPR22 (EN55022), IEC801-2,3,4, IEC555-2 VERIFICATION | | | | | |

NOTE :
1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
2.TOLERANCE INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
5.LOAD REGULATION IS MEASURED FROM 0% TO 100% RATED LOAD.
6.C3,4,32 MUST BE REMOVED.

JUN.09.98

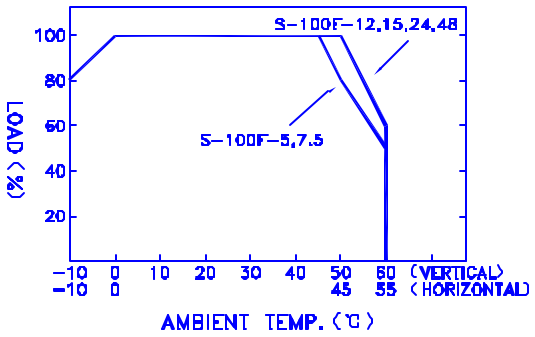
# S-100F SERIES

## BLOCK DIAGRAM

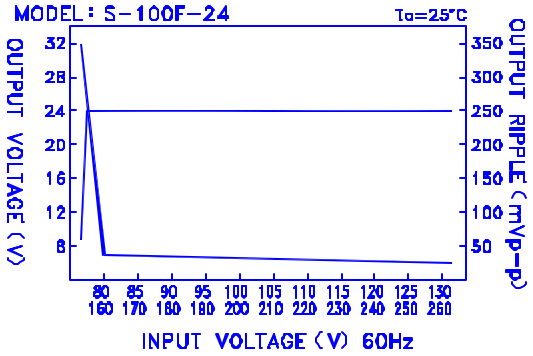



fosc : 83KHz

## OUTPUT DERATING




## STATIC CHARACTERISTICS




## DIMENSION (mm)

- CASE : 902
- TERMINAL PIN NO. ASSIGNMENT
  - PIN 1,2 : AC INPUT
  - PIN 3 : FG ⏚
  - PIN 4,5 : DC OUTPUT -V
  - PIN 6,7 : DC OUTPUT +V